

### REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-13 and 15-17 are currently pending in the present amendment. Claims 16 and 17 have been added; and Claims 1-5, 7, 8, 10, and 12 have been amended by the present amendment. The additions and amendments to the claims are supported by the originally filed specification and do not add new matter.<sup>1</sup>

In the outstanding Office Action, Claims 1-13 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,388,999 to Gorsuch et al. (hereinafter, “Gorsuch”) and U.S. Published Patent Application No. 2003/0223430 to Lodha (hereinafter, “Lodha”) in view of U.S. Published Patent Application No. 2002/0163933 to Benveniste (hereinafter, “Benveniste”).

Amended Claim 1 is directed to a method to allocate bandwidth, comprising in part:

freeing, at the central controller, a certain amount of the allocated predetermined amount of bandwidth as freed bandwidth, said freed bandwidth being a difference between the allocated predetermined amount of bandwidth and a needed amount of bandwidth, *wherein said needed amount of bandwidth is determined at the requesting terminal* and transmitted to the central controller, and does not exceed said predetermined amount of bandwidth; and

when said requesting terminal transmits a new needed amount of bandwidth greater than said needed amount of bandwidth, immediately returning as much of the freed bandwidth as required so that said new needed amount of bandwidth is available to said requesting terminal. [Emphasis Added].

Claim 1 has been amended to clarify that the central controller frees a certain amount of the allocated predetermined amount of bandwidth as freed bandwidth, the freed bandwidth being a difference between the allocated predetermined amount of bandwidth and a needed

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<sup>1</sup> See, e.g., Fig. 2B and the description thereof in Applicants' specification.

amount of bandwidth, wherein the needed amount of bandwidth *is determined at the requesting terminal* and transmitted to the central controller.

The Office Action acknowledges that Gursuch fails to disclose the above mentioned features of Claim 1.<sup>2</sup> Rather, the Office Action relies on Lodha for such teachings.

Lodha describes that a scheduler determines whether or not a queue ( $Q_i$ ) has packets to be forwarded, and if so, that the scheduler allows the queue ( $Q_i$ ) to forward the packets consuming up to the allocated bandwidth of the queue ( $Q_i$ ).<sup>3</sup> Further, Lodha describes that the scheduler determines whether or not there is any unused allocated bandwidth after the packets have been forwarded by the queue ( $Q_i$ ).<sup>4</sup>

Therefore, in Lodha, the scheduler determines whether or not there is any unused allocated bandwidth by determining the amount of the allocated bandwidth used up by the queue's forwarded packets, after the packets have been forwarded by the queue ( $Q_i$ ). Thus, in Lodha, the determination of the amount of the allocated bandwidth used up (i.e., the needed amount of bandwidth) by the queue's forwarded packets is performed *at the scheduler*.

However, there is no disclosure in Lodha that a requesting terminal operating the queue ( $Q_i$ ) determines the amount of the allocated bandwidth used up by the queue's forwarded packets, and transmits the same to the scheduler. Thus, Lodha does not disclose or suggest that said needed amount of bandwidth *is determined at the requesting terminal* and transmitted to the central controller, as recited in amended Claim 1.

Further, Applicants respectfully submit that Benveniste does not remedy the deficiencies of Lodha, discussed above.

Thus, no matter how the teachings of Gorsuch, Lodha, and Benveniste are combined, the combination does not teach or suggest that said needed amount of bandwidth is

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<sup>2</sup> See Office Action dated June 11, 2009, page 3.

<sup>3</sup> See Lodha, Fig. 3, and paragraph [0026].

<sup>4</sup> Id.

determined at the requesting terminal and transmitted to the central controller, as recited in amended Claim 1.

The above discussion regarding independent Claim 1 also applies to independent Claims 4, 7, and 10 because these claims recite features analogous to the features recited in Claim 1.

Accordingly, it is respectfully submitted that independent Claims 1, 4, 7, and 10 patentably define over any combination of Gorsuch, Lodha, and Benveniste. In addition, for the reasons discussed above regarding the patentability of independent Claim 1 over Gorsuch, Lodha, and Benveniste, it is respectfully submitted that dependent Claims 2, 3, 5, 6, 8, 9, 11-13, and 15, which directly or indirectly depend from independent Claims 1, 4, 7, or 10, also patentably define over any combination of Gorsuch, Lodha, and Benveniste.

The present amendment adds Claims 16 and 17 for examination on the merits. No new matter has been added.<sup>5</sup> It is respectfully submitted that the features of Claims 16 and 17 distinguish from the features recited in Gorsuch, Lodha, and Benveniste.

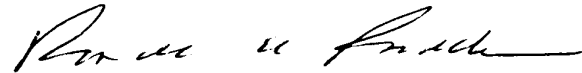
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<sup>5</sup> Claims 17-20 recite features analogous to features recited in original Claim 2.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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